Camclosure® IS Series Rugged Mini Dome

IS110 SERIES SURFACE MOUNT, WDR, DAY/NIGHT, HIGH RES

Product Features

- Fully-Integrated Enclosure with Camera and Lens
- Rugged, High-Impact, Vandal-Resistant, Puncture-Proof Domes; Tamper-Resistant Hardware
- 4 Camera Options:
  - Day/Night Wide Dynamic Range (WDR): Pixel-Based Imager for Accurate Color Representation, Progressive Scan
  - Day/Night High Resolution: 540 TVL
  - Wide Dynamic Range (WDR): Pixel-Based Imager for Accurate Color Representation, Progressive Scan
  - High Resolution Color: 540 TVL
- Varifocal Lens Options: 3 mm to 9.5 mm, 9 mm to 22 mm
- Fixed Lens Options: 3 mm, 3.6 mm, 6 mm, 8 mm, 12 mm
- Includes Both Composite and Unshielded Twisted Pair (UTP) Outputs
- 12 VDC or 24 VAC Operation, Autosensing
- Available with Smoked or Clear Bubble
- Service Connector for Video Output

IS110 SERIES DOME

IS110 SERIES DOME WITH ICS110-PG PENDANT ADAPTER AND SWM-GY MOUNT

Camera Modules

The **IS110 Series Camclosure® Integrated Camera System** offers a large selection of camera and lens options. Available camera modules include the following:

- **Day/night wide dynamic range (WDR)** and **wide dynamic range**—Pelco's WDR uses a pixel-based imager that adjusts for lighting by pixel. Traditional CCD cameras adjust the entire image for lighting conditions that appear in a small portion of the image or that are not extreme. Different lighting problems occur at night. Car headlights and parking lot lights are good examples of problematic video images. Use Pelco's Day/Night WDR where you need the camera to adjust from extreme lighting to low light conditions.
- **Day/night high resolution (540 TVL)** color camera with auto iris, varifocal lens—Application examples include environments that require monochrome images at night and color images during the day.
- **High resolution (540 TVL)** color camera with auto iris, varifocal lens or fixed iris lens—Application examples include all general-purpose environments.

Enclosure Modules

The **IS110 Series Camclosure Integrated Camera System** combines an environmental cover, back box, camera, lens, and lower dome into a small, high-security system that is quick and easy to install. The system is perfect for a variety of indoor and outdoor applications and its versatile design allows for multiple mounting options.

The **IS110 Series** can be installed directly into a ceiling or wall, or to a 1.5-inch (3.81 mm) NPT fitting with the optional pendant mount adapter (ICS110-PG). The unit can also mount directly to a 4S electrical box using the optional adapter plate (ICS110-AP) or a standard plaster ring.

The system's back box has three conduit openings: two in the base, and a threaded 0.75-inch (1.91 cm) opening in the side. The environmental cover can be used to hide and protect the side conduit opening if it is not used.

IP66

U.S. Patents D476,025; 6,715,939 B2; 6,805,498 B2

International Standards Organization Registered Firm; ISO 9001 Quality System

TECHNICAL SPECIFICATIONS

GENERAL

Construction	Aluminum with steel camera mounting bracket and polycarbonate dome
Finish	Light gray polyester powder coat
Light Attenuation	
Smoked	1.5 F-stops light loss
Clear	Zero light loss
Unit Weight	2.20 lb (1.00 kg)
Shipping Weight	4.0 lb (1.81 kg)

ELECTRICAL

Input Voltage*	12 VDC or 24 VAC (±10%), autosensing
Synchronization	Internal or AC line lock
Power Consumption	
Camera	<3 W (DW/CW models) <4 W (DN/CH models)
Heaters	10 W when active; thermostatically controlled

MECHANICAL

Cable Entry	One 0.75-inch (1.91 cm) NPT threaded opening on side; two 0.75-inch (1.91 cm) openings on base
Pan/Tilt Adjustment	Manual
Pan	360°
Tilt	80° (20° to 100° range)
Rotation	360°

VIDEO

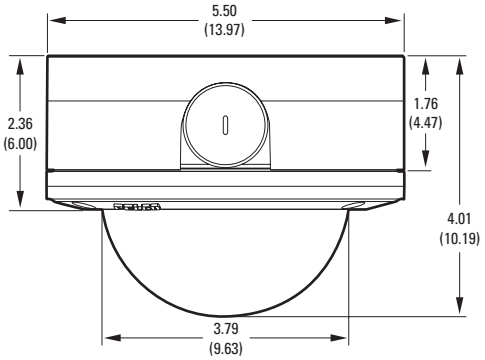
Signal System	NTSC or PAL
Video Output	
Composite	1 Vp-p, 75 ohms
UTP	1 Vp-p, 100 ohms
Video Connectors	1 composite BNC and 1 UTP
Service Connector	3-conductor, 2.5 mm connector for video output to optional ICS-SC cable

ENVIRONMENTAL

Environment	Low temperature, indoor/outdoor
Operating Temperature	-50° to 122°F (-46° to 50°C); de-ices to 25°F (-4°C)
Thermostat Operation	Heater is thermostatically controlled to activate ON at 50°F (10°C) and OFF at 80°F (27°C)

CERTIFICATIONS/RATINGS/PATENTS

- CE, Class B
- UL Listed
- UL Listed to Canadian safety standards
- FCC, Class B
- Meets NEMA Type 4X and IP66 standards
- U.S. Patents D476,025; 6,715,939 B2; 6,805,498 B2



NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES.

*24 VAC power is recommended when installing any Camclosure Integrated Camera System under fluorescent lighting conditions.

TECHNICAL SPECIFICATIONS

CAMERA SPECIFICATIONS

	Day/Night Wide Dynamic Range Varifocal, Auto Iris (DW Series)	Day/Night High Resolution Varifocal, Auto Iris (DN Series)	Wide Dynamic Range Varifocal, Auto Iris (CW Series)	High Resolution Varifocal, Auto Iris (CH Series)
Imaging Device	1/3-inch Pixel Based Imager	1/3-inch Interline Color CCD	1/3-inch Pixel Based Imager	1/3-inch Interline Color CCD
Picture Elements	720 (H) x 540 (V)	NTSC: 768 (H) x 494 (V) PAL: 752 (H) x 582 (V)	720 (H) x 540 (V)	NTSC: 768 (H) x 494 (V) PAL: 752 (H) x 582 (V)
Dynamic Range (DW/CW only)	102 dB typical 120 dB maximum	—	102 dB typical 120 dB maximum	—
Scanning System	2:1 Interlace/ Progressive (DIP switch)	2:1 Interlace	2:1 Interlace/ Progressive (DIP Switch)	2:1 Interlace
Horizontal Resolution	NTSC: 504 TV lines PAL: 504 TV lines	NTSC: 540 TV lines PAL: 540 TV lines	NTSC: 504 TV lines PAL: 504 TV lines	NTSC: 540 TV lines PAL: 540 TV lines
Signal-to-Noise Ratio	>53 dB	>50 dB	>53 dB	>50 dB
Minimum Illumination	Color (day): 0.8 lux SENS 8X: 0.2 lux B-W (night): 0.08 lux SENS 8X: 0.02 lux (F1.0, 40 IRE, AGC on, 75% scene reflectance)	Color (day): 0.15 lux B-W (night): 0.015 lux (F1.0, 40 IRE, AGC on, 75% scene reflectance)	Color (day): 0.8 lux SENS 8X: 0.2 lux (F1.0, 40 IRE, AGC on, 75% scene reflectance)	0.3 lux (F1.0, 40 IRE, AGC on, 75% scene reflectance)
Gain Control	Auto (36 dB maximum)	Auto/Manual (DIP switch)	Auto (36 dB maximum)	Auto/Manual (DIP switch)
Exposure	Auto (1/15 - 1/22,000)	Auto (1/60 - 1/100,000)	Auto (1/15 - 1/22,000)	Auto (1/60 - 1/100,000)
White Balance	Auto or manual (DIP switch), 2800°K - 7500°K	Auto or manual (DIP switch), 2500°K - 9500°K	Auto or manual (DIP switch), 2800°K - 7500°K	Auto or manual (DIP switch), 2500°K - 9500°K
Backlight Compensation	Auto	ON/OFF (DIP switch)	Auto	ON/OFF (DIP switch)

LENS SPECIFICATIONS

	Varifocal With Auto Iris				Fixed Focal Without Iris				
Series	DW/CW Series		DN/CH Series		CH Series				
Focal Length	3.0 mm ~ 9.5 mm	9.0 mm ~ 22.0 mm	3.0 mm ~ 9.5 mm	9.0 mm ~ 22.0 mm	3 mm	3.6 mm	6.0 mm	8.0 mm	12.0 mm
Format Size	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch	1/3-inch
Relative Aperture (F)	1.0 to 1.8	1.5 to 2.9	1.0 to 1.8	1.5 to 2.9	2.0	2.0	2.0	2.0	2.2
Operation									
Iris	Auto	Auto	Auto	Auto	N/A	N/A	N/A	N/A	N/A
Focus	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
Zoom	Manual	Manual	Manual	Manual	N/A	N/A	N/A	N/A	N/A
Angle of View*									
Horizontal	100.4° to 31.6°	32.4° to 13.6°	95.0° to 30.2°	30.6° to 13.0°	90.2°	72.9°	40.1°	31.5°	19.7°
Diagonal	131.6° to 39.6°	41.4° to 17.2°	123.6° to 37.6°	39.2° to 16.4°	120.0°	92.0°	53.0°	40.0°	28.0°
Vertical	72.8° to 23.8°	23.8° to 10.2°	69.0° to 22.6°	22.6° to 9.8°	65.4°	54.1°	30.4°	23.7°	15.0°

*Focal length specifications presume a 10% horizontal and 4% vertical monitor overscan.

SYSTEM MODELS AND ACCESSORIES

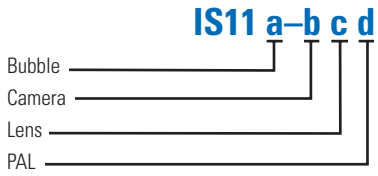
MODEL NUMBERS

Dome Only

IS110-ENC IS110 Series surface mount enclosure (no camera/lens)
IS110-LD IS110 Series smoked bubble
IS111-LD IS110 Series clear bubble with liner
When ordering an IS110 Series surface mount dome with no camera or lens, please order 1 enclosure and 1 bubble.

System Numbers

Use this table to create a model number to specify your IS110 Series Camclosure. Note the additional information below the table for fixed lens and NTSC/PAL options.
For example, IS111-DNV9X is the model number for a PAL version color day/night high resolution camera with a clear bubble and a 3 mm to 9.5 mm varifocal lens.
For information, contact your Pelco sales representative.



Bubble (a)	Camera (b)	Lens (c)	PAL (d)
0 Smoked 1 Clear with black liner	DW Color Day/Night Wide Dynamic Range DN Color Day/Night High Resolution CW Color Wide Dynamic Range CH Color High Resolution	Available with all cameras: V9 Varifocal, 3 mm to 9.5 mm, Auto Iris V22 Varifocal, 9 mm to 22 mm, Auto Iris Available with CH cameras: 3 Fixed, 3 mm 3.6 Fixed, 3.6 mm 6 Fixed, 6 mm 8 Fixed, 8 mm 12 Fixed, 12 mm	DN and CH cameras only: X PAL Do not use for NTSC.

RECOMMENDED POWER SUPPLIES

TF2000	Power supply for one 24 VAC camera, 20 VA
MCS Series	Multiple 24 VAC camera power supply, indoor
MCS*E Series	Multiple 24 VAC camera power supply, indoor
WCS Series	Single/multiple 24 VAC camera power supply, outdoor

OPTIONAL ACCESSORIES

ICS110-AP	Adapter plate for a 4-square electrical box
ICS110-PG	Pendant mount adapter
ICS110-BV	Breather vent to prevent condensation from forming inside the unit
SWM Series	Compact wall mount with cable feedthrough. Requires ICS110-PG adapter.
ICS-SC	4-foot service/monitor cable; compatible with any standard monitor BNC connector

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